### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-010471 Address: 333 Burma Road **Date Inspected:** 30-Dec-2009

City: Oakland, CA 94607

OSM Arrival Time: 1900 **Project Name:** SAS Superstructure **OSM Departure Time:** 700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes No Gong Liang Zhu **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No **Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component: OBG/TOWER** 

### **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Shrikant Utekar was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

TRIAL ASSEMBLY YARD

ULTRASONIC INSPECTION

# **OBG SEGMENT 1AW -1BW**

This Quality Assurance (QA) Inspector performed conventional UT (Ultrasonic Testing) in conjunction with ABF Ultrasonic Testing (UT) department for detection of planar transverse indication.

Ultrasonic Testing (UT) performed on repair areas of the bottom panel splice weld between OBG segment 1AW and 1BW (OBW1A-008) utilizing scanning pattern A, B, C and D (Fig 6.7).

**BLASTING SHOP** 

VISUAL INSPECTION

**OBG SEGMENT 7EE** 

# WELDING INSPECTION REPORT

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This Quality Assurance (QA) Inspector performed random visual inspection after blasting along with Caltrans Quality Assurance (QA) Inspector Mr. Daniel on inside bottom panel and side panel OBG segment 7DE. During the inspection we found normal minor gouges, arc strikes, spatter, undercut like discontinuities. For additional information see attached photo.

**BAY** #10

This QA Inspector randomly observed the following work in progress.

#### NORTH TOWER LIFT #4

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 052075 performing Flux Cored Arc Welding process for the weld NSTL4-3J/L-114 located on PCMK North tower lift 4. ZPMC QC Mr. Gong Liang Zhu monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-4333-TC-P5-F.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 201825 performing Flux Cored Arc Welding process for the weld NSTL4-3J/L-42 located on PCMK North tower lift 4. ZPMC QC Mr. Gong Liang Zhu monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-4333-TC-P5-F.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 050041 performing Flux Cored Arc Welding process for the weld NSTL4-3I/L-114 located on PCMK North tower lift 4. ZPMC QC Mr. Gong Liang Zhu monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-4333-TC-P5-F.

Unless otherwise noted, all work observed on this dated appeared to generally comply with applicable contract documents.



**Summary of Conversations:** 

# WELDING INSPECTION REPORT

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No relevant conversations.

## **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang +(86) 150.0042.2372, who represents the Office of Structural Materials for your project.

Inspected By:	Utekar,Shrikant	Quality Assurance Inspector
Reviewed By:	Dawson,Paul	QA Reviewer